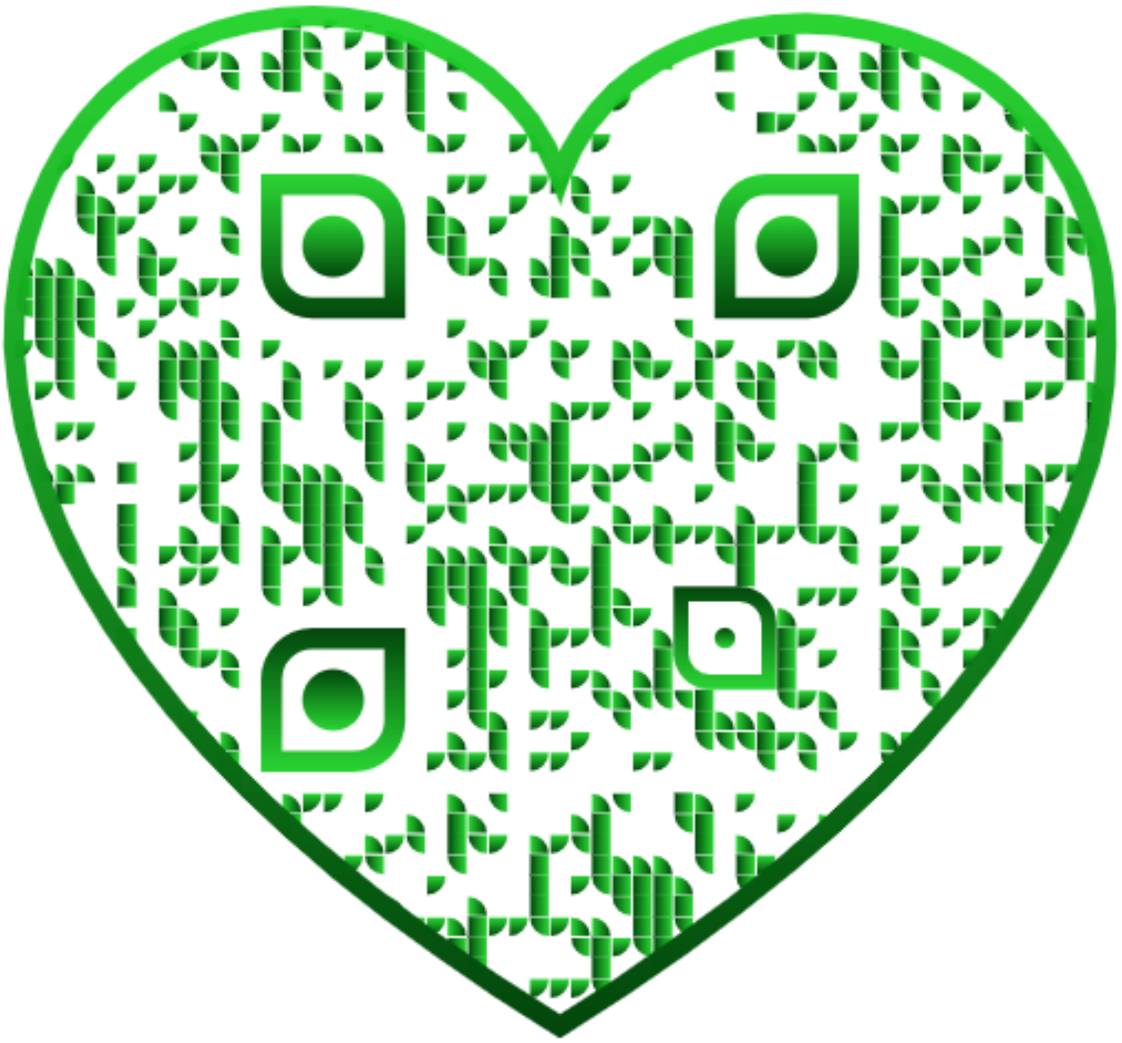
Pharmaceutical Procurement



Chapter objectives

- At the end of this chapter, students are able to:
  - Explain the basic concepts of pharmaceutical procurement
  - State the operational principles of good pharmaceutical procurement
  - Identify factors affecting cost of pharmaceuticals
  - Discuss the pharmaceutical procurement process
  - Describe pharmaceutical procurement methods
  - Identify common challenges related to pharmaceutical procurement

Introduction

- Pharmaceutical procurement system is a major determinant of **pharmaceutical availability** and **total pharmaceutical costs**

- **Procurement:**
  - It is the process of **acquiring** supplies from private or public supplier or through purchasing from manufacturer or agencies or bilateral aids program
  - Process of **purchasing supplies** directly from national or multinational private or public suppliers; purchasing from global agencies & procurement mechanisms and/or regional procurement System or purchasing from international agents.

Introduction…

- **Pharmaceutical procurement:**
  - It is the process of acquiring drug products through purchase, manufacture, or donation
  - It is only one of several elements of pharmaceutical supply management but can be the function that takes up much of the time of pharmacists
  - It is a complex process that involves many steps, agencies, ministries, and manufacturers

Introduction…

- An effective pharmaceutical procurement process should;
  - Seek to manage the buyer-seller relationship in a transparent and ethical manner
  - Procure the right medicines in the right quantities
  - Obtain the lowest practical purchase price
  - Ensure that all procured pharmaceuticals meet recognized standards of quality
  - Arrange timely delivery to avoid shortages and stock-outs
  - Ensure supplier reliability with respect to service and quality
  - Set the purchasing schedule, formulas for order quantities, and safety stock levels to achieve the lowest total cost of purchasing at each level of the system

Strategic objectives of pharmaceutical procurement

- There are four strategic objectives of pharmaceutical procurement set by WHO
  - 1. Procure the most cost-effective drugs in the right quantities
  - 2. Select reliable suppliers of high-quality products
  - 3. Ensure timely delivery
  - 4. Achieve the lowest possible total cost

Operational principles for good pharmaceutical procurement

- Key principle of good pharmaceutical procurement for health system include;
  - Reliable payment and good financial management
  - Procurement by generic name
  - Clear specification of recognized pharmaceutical quality standard
  - Limited to EML or formulary list
  - Bulk purchases
  - Formal supplier qualification and monitoring
  - Competitive bidding process
  - Transparency and written procedure etc….

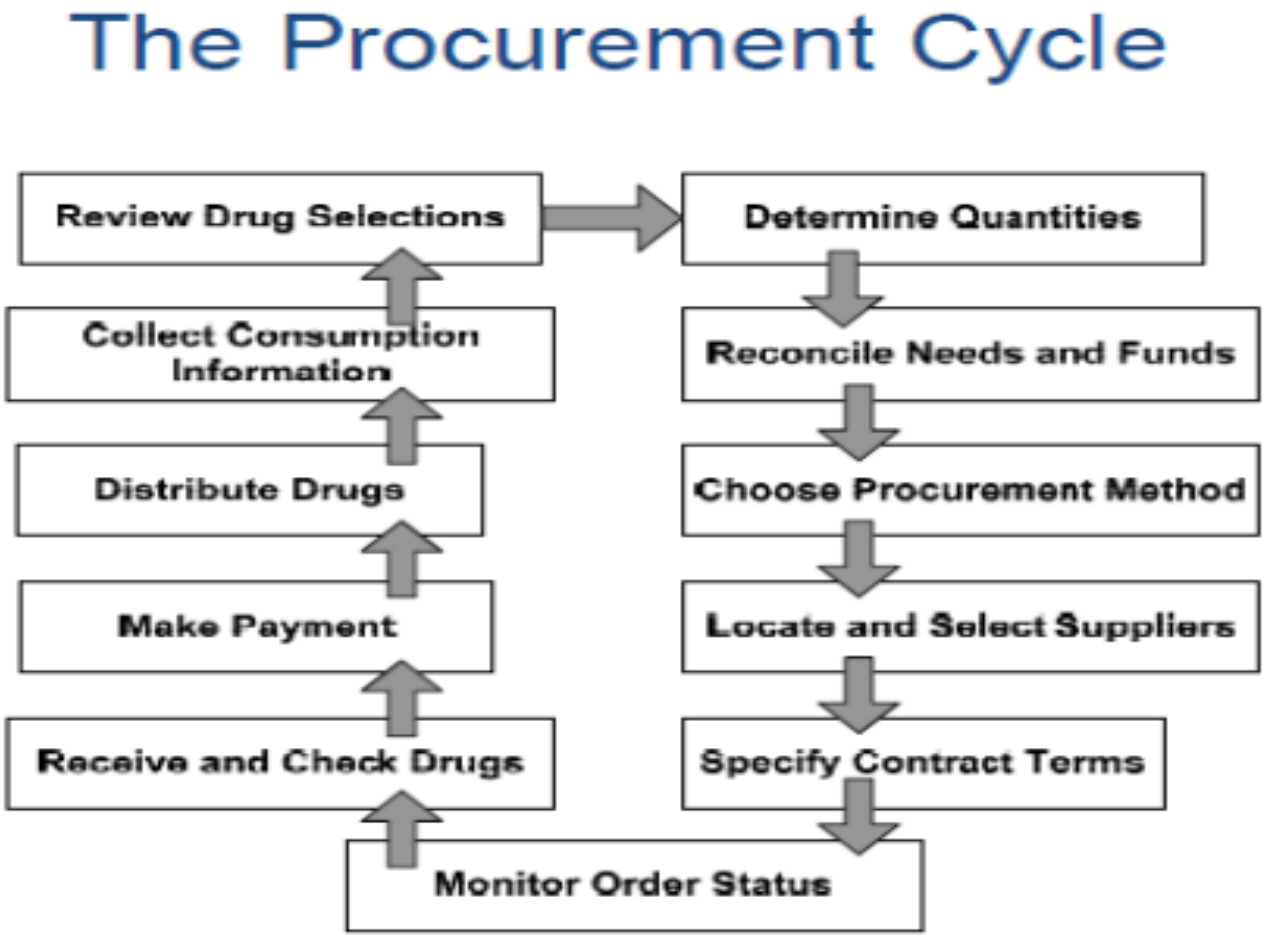
Procurement....

- An effective procurement process should:
  - Procure the right drug in the right time
  - Obtain the lowest possible purchase price
  - Ensures that all drugs procured meet recognized standard quality
  - Arrange timely delivery to avoid shortage and stock out
  - Ensure supplier reliability with respect to service and quality
  - Set the purchasing schedule, formulas for order quantities and safety stock levels to achieve the lowest total cost of each level of the system
  - Ahieve these objectives in the most efficient manner possible

Pharmaceutical procurement cycle

- The procurement cycle includes most of the decisions & action that determines;
  - The specific medicine quantities obtained
  - Prices paid
  - Quality of medicines received

Managing Procurement…



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Common Procurement Challenges

- Absence of a comprehensive procurement policy
- Inadequate rules, regulations, and structures
- Public sector staff with little experience and training to respond to market situations
- Government funding that is insufficient and/or released at irregular intervals
- Donor agencies with conflicting procurement regulations
- Fragmented drug procurement at provincial or district level
- Lack of unbiased market information
- Corruption and lack of transparency

Factors influencing pharmaceutical prices and total costs

- Given the limited budgets of virtually all health programs, pharmaceutical purchase costs must be a concern of all including;
  - **Policy makers,**
  - **Senior officials,**
  - **Essential medicines program managers &**
  - **Procurement staffs**
- Pharmaceutical costs include several different components; Some cots are obvious and some are not.

Factors influencing pharmaceutical prices and total costs…

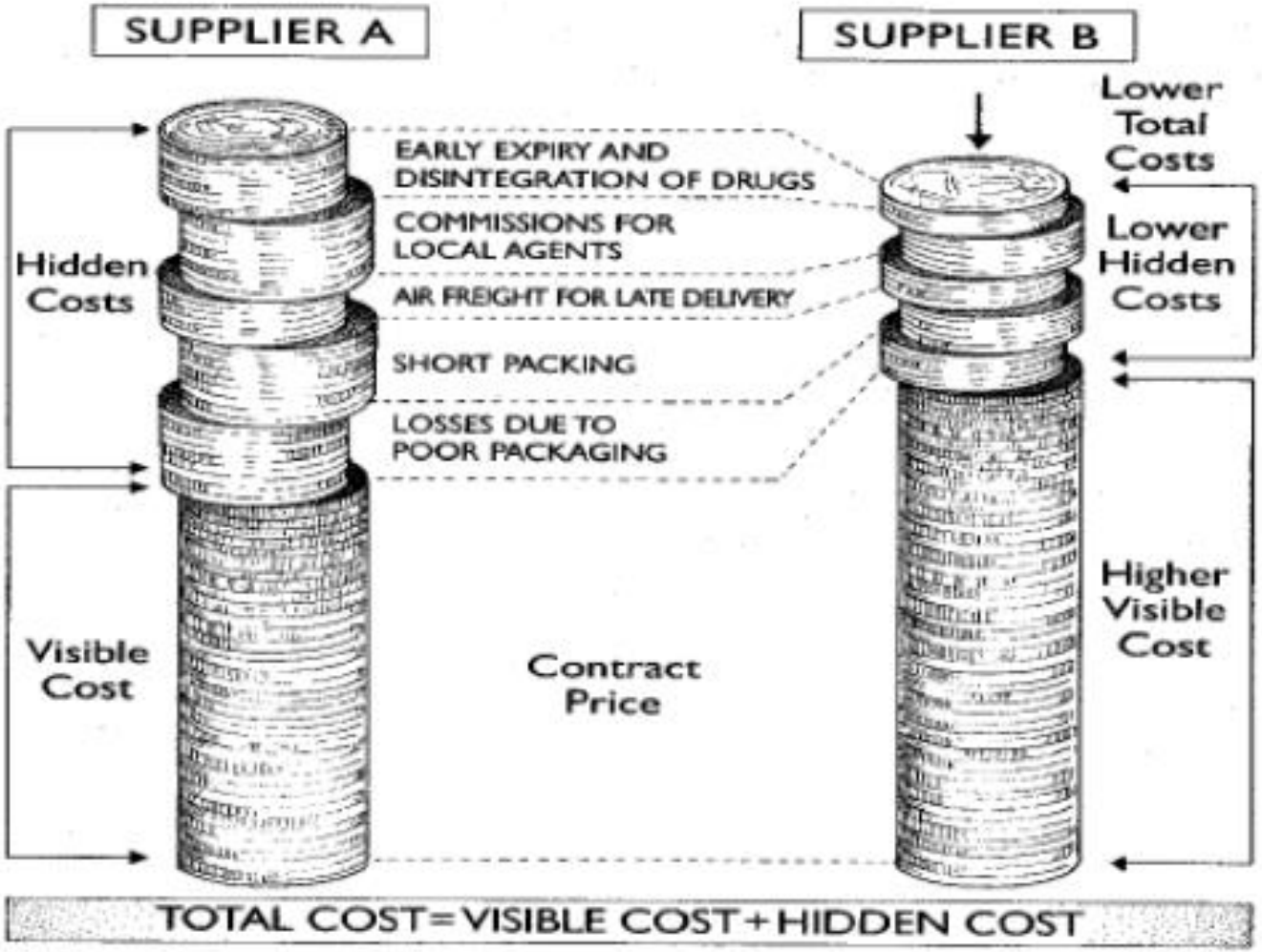
- **Unit prices**
  - **Competition** among supplier
    - No of products and **generic** version: **Rule of five**
    - **Gov't policy:** registration, licensing, prescribing, dispensing
    - **Procurement method**
- Reorder frequency & the total cost of pharmaceutical purchasing

  – Total cost = Drug acquisition price + inventory holding cost + purchase operating cost + shortage cost

Factors influencing pharmaceutical prices…

- **Cost** minimized by **Reorder** frequency
  - **Interval** b/n order (annual, scheduled, perpetual)
  - **Safety** stock target- **lead** time, **consumption** pattern, service level
- **Visible** and **hidden** costs
  - Total cost= Hidden cost + visible cost

Impact of hidden costs in procurement



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Impact of hidden costs…

- **Which supplier encountered higher hidden cost???**
- Supplier **A** has quoted a lower price, but additional expenses resulting from poor performance ultimately raise the total cost above that quoted by supplier B.
- Many of the hidden costs mentioned in the figure above can be minimized through careful procurement practices such as;
  - Avoiding last minute orders due to lack of planning
  - Other hidden costs are imposed or regulated by the gov't which may be more difficult for the procurement offices to work around

Pharmaceutical procurement Methods

- There are numerous mechanisms by which government, NGOs, and other organizations manage their in-house procurement of pharmaceuticals
- Pharmaceutical procurement methods, at any level of health system generally fall into basic categories including;
  - ✓ Open tender
  - ✓ Restricted tender
  - ✓ Competitive negotiation
  - ✓ Direct procurement
  - ✓ E-procurement and reverse auction

Procurement Methods…

- **1. Open tender**

  – It is formal procedure by which **quotation** are invited from any manufacturer or its representative on a local or worldwide basis

  – Subject to the term and conditions specified in tender invitation

- **2. Restricted tender (closed bid or selective tender)**
  - Open only to prequalified suppliers
    – Interested supplier must be approved in advance
    – **Prequalification** process e.g Adhering to GMP, past supply performance, financial viability and related factor

Procurement Methods…

- **3. E- procurement and reverse auction**
  - **E-** procurement is internet based tendering
- **4. Reverse auction**

  – **Variation** of restricted tender

  – Qualified bidders submit an official offer

  – The lowest **offer** received is **posted publicly** without naming the bidder in the first round

  – Qualified bidders are invited to offer **lower** prices than **posted** low price.

  – The process continues round by round until **no more** prices are submitted.

Procurement methods…

- **5. Competitive negotiation or negotiated procurement**

  — buyer approaches a **limited** number of **selected** supplier (at least three) for price quotation.

  – Possible to bargain specific price or service arrangements

    – E.g. reduced price for ARV

  – Mainly **used in private sector**

- 6. **Direct procurement**

  — **direct** purchase from single supplier either at the quoted or negotiated price

  – **Simplest, most expensive** method of procurement

  – For **single** source drugs

  - Well suited for emergency situations

Procurement methods…

Method	Advantages	Disadvantages
Open tender	♦ Many bids, some with low prices ♦ New suppliers can be identified	♦ High workload is required in evaluation of bids and selection of suppliers
Restricted tender	♦ Fewer bids (less workload than open tender ♦ Quality easier to ensure	♦ More limited options ♦ System for prequalification must be set
Competitive negotiation	♦ Suppliers are generally well known ♦ Less evaluation work	♦ Higher price
Direct procurement	♦ Easy and quick	♦ Higher price

Monitoring and evaluation of pharmaceutical procurement performance

- Procurement should be monitored and evaluated against its objectives using appropriately designed indicators
- The following indicators can be used to measure the performance of procurement.
- **1. Procurement efficiency:**
  - This indicator measures the efficiency of procurement practices by comparing the prices paid for medicines with international price standards.
  - Formula for computing this indicator;

$$\text{Procurement efficiency} = \frac{\text{Median price of products procured}}{\text{International median reference value}}$$

Monitoring and evaluation of pharmaceutical procurement performance…

2. On -Time Delivery:

- Measures the percentage of all orders delivered by the requested delivery date, as indicated in the purchase order or contract during a defined period of time.
- The Formula for calculating this indicator;

$$\text{On-time Delivery} = \frac{\text{Number of orders delivered within requested period} \times 100}{\text{Total number of orders delivered}}$$

Monitoring and evaluation of pharmaceutical procurement performance…

3. Percentage of orders fully comply with essential medicine list:

- Evaluates the percentage of requisitions made for medicines only within the essential medicine list.

$$\%\ \text{of orders fully comply with EML} = \frac{\text{Number of orders fully comply with EML} \times 100}{\text{Total number of orders delivered}}$$

Monitoring and evaluation of pharmaceutical procurement performance…

4. Supplier Fill Rate:

- Measures supplier's ability to fill orders completely in terms of items and quantity as defined in purchase order or contracts, during a definite period of time.

$$\text{Supplier Fill Rate} = \frac{\text{Number of Orders Filled Correctly}}{\text{Total Number of Orders}} * 100$$

Monitoring and evaluation of pharmaceutical procurement performance…

- Other indicators that can be used for measuring the pharmaceutical procurement performance include;
  - Adherence to procurement time table
  - Percentage of procurement with defective products
  - Average lead time of the supplier and
  - Others